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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/032,764	10/22/2001	Kohji Kanamori	N32565600	5751

7590

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EXAMINER

FOURSON III, GEORGE R

ART UNIT

PAPER NUMBER

2823

DATE MAILED: 07/25/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

**Advisory Action**

Application No.

10/032,764

Applicant(s)

KANAMORI, KOHJI

Examiner

George Fourson

Art Unit

2823

--The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

THE REPLY FILED 24 June 2003 FAILS TO PLACE THIS APPLICATION IN CONDITION FOR ALLOWANCE. Therefore, further action by the applicant is required to avoid abandonment of this application. A proper reply to a final rejection under 37 CFR 1.113 may only be either: (1) a timely filed amendment which places the application in condition for allowance; (2) a timely filed Notice of Appeal (with appeal fee); or (3) a timely filed Request for Continued Examination (RCE) in compliance with 37 CFR 1.114.

**PERIOD FOR REPLY [check either a) or b)]**

- a) ☐ The period for reply expires \_\_\_\_\_ months from the mailing date of the final rejection.
- b) ☒ The period for reply expires on: (1) the mailing date of this Advisory Action, or (2) the date set forth in the final rejection, whichever is later. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of the final rejection.
- ONLY CHECK THIS BOX WHEN THE FIRST REPLY WAS FILED WITHIN TWO MONTHS OF THE FINAL REJECTION. See MPEP 706.07(f).

Extensions of time may be obtained under 37 CFR 1.136(a). The date on which the petition under 37 CFR 1.136(a) and the appropriate extension fee have been filed is the date for purposes of determining the period of extension and the corresponding amount of the fee. The appropriate extension fee under 37 CFR 1.17(a) is calculated from: (1) the expiration date of the shortened statutory period for reply originally set in the final Office action; or (2) as set forth in (b) above, if checked. Any reply received by the Office later than three months after the mailing date of the final rejection, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

1. ☐ A Notice of Appeal was filed on \_\_\_\_\_. Appellant's Brief must be filed within the period set forth in 37 CFR 1.192(a), or any extension thereof (37 CFR 1.191(d)), to avoid dismissal of the appeal.
2. ☐ The proposed amendment(s) will not be entered because:
- (a) ☐ they raise new issues that would require further consideration and/or search (see NOTE below);
  - (b) ☐ they raise the issue of new matter (see Note below);
  - (c) ☐ they are not deemed to place the application in better form for appeal by materially reducing or simplifying the issues for appeal; and/or
  - (d) ☐ they present additional claims without canceling a corresponding number of finally rejected claims.

NOTE: \_\_\_\_\_

3. ☐ Applicant's reply has overcome the following rejection(s): \_\_\_\_\_.
4. ☐ Newly proposed or amended claim(s) \_\_\_\_\_ would be allowable if submitted in a separate, timely filed amendment canceling the non-allowable claim(s).
5. ☒ The a) ☐ affidavit, b) ☐ exhibit, or c) ☒ request for reconsideration has been considered but does NOT place the application in condition for allowance because: See Continuation Sheet.
6. ☐ The affidavit or exhibit will NOT be considered because it is not directed SOLELY to issues which were newly raised by the Examiner in the final rejection.
7. ☐ For purposes of Appeal, the proposed amendment(s) a) ☐ will not be entered or b) ☐ will be entered and an explanation of how the new or amended claims would be rejected is provided below or appended.

The status of the claim(s) is (or will be) as follows:


Claim(s) allowed: \_\_\_\_\_

Claim(s) objected to: \_\_\_\_\_

Claim(s) rejected: \_\_\_\_\_

Claim(s) withdrawn from consideration: \_\_\_\_\_

8. ☐ The proposed drawing correction filed on \_\_\_\_\_ is a) ☐ approved or b) ☐ disapproved by the Examiner.
9. ☐ Note the attached Information Disclosure Statement(s) (PTO-1449) Paper No(s). \_\_\_\_\_
10. ☐ Other: \_\_\_\_\_

  
George Fourson  
Primary Examiner  
Art Unit: 2823

Continuation of 5. does NOT place the application in condition for allowance because: Applicant argues that Japan '268 "teaches away" from Bois because Japan '268 contains the further teaching related to use of the LOCOS mask as a gate. However, as stated in the office action mailed 4/24/03, the additional teaching that the mask of Japan '268 can be used as a gate does not negate the teaching relied on that the mask is useful in a LOCOS process. Applicant states that one of ordinary skill in the art reviewing Japan '268 would not pursue removing the mask as in the process of Bois. However, one of ordinary skill in the art reviewing Bois would pursue use of the mask of Japan '268 because it is useful as a LOCOS mask, which is the reasoning used in the rejections in question. The reference does not indicate that removal of the LOCOS mask would be an inoperative process. The reference merely expresses a preference for or discloses advantages for additionally using the LOCOS mask as a gate. Disclosed examples and preferred embodiments do not constitute a teaching away from a broader disclosure or nonpreferred embodiments. In re Susi, 169 USPQ 423 (CCPA 1971). "A known or obvious composition does not become patentable simply because it has been described as somewhat inferior to some other product for the same use." In re Gurley, 31 USPQ2d 1130, 1132 (Fed. Cir. 1994). A reference may be relied upon for all that it would have reasonably suggested to one having ordinary skill in the art, including nonpreferred embodiments. Merck & Co. v. Biocraft Laboratories, 874 F.2d 804, 10 USPQ2d 1843 (Fed. Cir.), cert. denied, 493 U.S. 975 (1989). Even a teaching away from a claimed invention does not render the invention patentable. See Celeritas Technologies Ltd. v. Rockwell International Corp., 150 F.3d 1354, 1361, 47 USPQ2d 1516, 1522-23 (Fed. Cir. 1998), where the court held that the prior art anticipated the claims even though it taught away from the claimed invention. "The fact that a modern with a single carrier data signal is shown to be less than optimal does not vitiate the fact that it is disclosed." To further clarify, a prior art opinion that a claimed invention is not preferred for a particular limited purpose, does not preclude utility of the invention for that or another purpose, or even preferability of the invention for another purpose. Applicant's argument that Japan '268 "teaches away" from Kwon are rebutted for the reasons above.

Applicant argues that the office action mailed 4/24/03 contains a new grounds of rejection with respect to claim 13. However, the element which is recited in claim 13 was identified in the office action mailed 2/3/03 as being disclosed. No new elements are pointed to in the office action mailed 4/24/03. Further, it was reasonable to expect applicant to recognize that an etch stopper for a CMP step was being identified by pointing to the nitride film, for example, of the process made obvious by the combination of references relied on because the same material is admitted in the instant specification as being able to perform that function (instant page 11, line 6). Applicant's argument that the nitride film of the process made obvious by the combination is not encompassed by the term is likewise addressed by the instant admission pointed to above that ability to function as an etch stopper is an intrinsic property of a nitride film.

Applicant's argument regarding the combination of the references of the combination with the teachings of Lai is addressed above, the argument being analagous to that related to combining the teachings of Bois or Kwon with those of Japan '268.

Applicant argues that Rho et al and Suh contain additional teachings other than those relied on. However, the additional teachings do not negate the relied on teaching that silicon nitride is useful as a material in forming a spacer on a hard mask prior to using the mask in an etching process.

Applicant states that it is not clear to applicant how claim 14 is anticipated by Bois. In an abundance of caution and in the interest of compact prosecution the rejection will be further clarified. Mask 4 of Bois is disclosed to be an oxide film (col.4, line 5). The lower portion of the layer of silicon dioxide 4 is a layer of oxide and the remaining upper portion of layer 4 is a stacked film as recited. Contrary to applicant's conclusory allegation, the examiner did not admit that Bois fails to disclose the process of claims 14 and 15 within the rejection of claim 8.

Applicant argues that the rejection of claims 16-20 under 35 USC 103 fails to include disclosure or suggestion of removal of the stacked film pattern and formation of a gate oxide film. However, as stated in the office action mailed 4/24/03, Bois discloses removal of the LOCOS mask and formation of MOS IC devices, including transistors. The abbreviation "MOS IC devices" in combination with "including transistors" connotes "metal oxide semiconductor integrated circuit devices" which comprise a gate insulated from the substrate by an oxide film, by definition.

Applicant argues that the rejection of claims 16-20 under 35 USC 103 fails to include disclosure or suggestion of forming first electrode portions higher than a central portion. However, as stated in the office action mailed 4/24/03, Lai teaches gate electrode layer 28 overlapping the field oxide regions and which is defined to form the gate. In such a process the ends of the gate on the higher elevation field oxide regions would be higher in elevation than the central portion (col.5, lines 32-36).

Applicant argues that the rejection of claims 16-20 under 35 USC 103 fails to include disclosure or suggestion of "first insulating film even with a top surface of the electrode". It is respectfully submitted that "first insulating film" is not recited in the claim. However, "insulating film" is recited and addressed herein. The claim instant recites "insulating film substantially even with a top surface of the electrode". This is shown by Lai in part due to the subjectivity associated with use of "substantially". The instant specification provides no basis for determining the degree associated with the term "substantially".